

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013645**Date Inspected:** 24-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

CWI Inspectors: NA

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Yard, back of bay 17

ZPMC has recently presented QA personnel with a "Notification of Witness Inspection" document that states ZPMC is requesting Caltrans to perform magnetic particle (MT) inspections of OBG segment 9EW welds as listed on Tag #1 through Tag #7. This QA Inspector performed random magnetic particle (MT) inspections of the welds that are listed below and these welds appear to comply with AWS D1.5 MT requirements. For additional information on these inspections see this QA Inspector's TL6028 Magnetic Particle Test Report for additional information.

Tag 3

Seg057B-012,016,037

Tag 4:

SSD29-PP83.5-061, 062, 063, 064, 065, 066, 067, 068, 069,070

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SSD13-PP83-040, 042, 044, 052, 054, 056, 058, 060, 97, 99, 101, 115, 117, 119, 121

SSD13-PP084-026, 028, 030, 032, 052, 054, 056, 058, 060, 086, 088, 090, 092, 116, 118, 120, 122, 124

(Note: welds shown on SSD13-PP84 have a QA triangle dated 2-18-2009 by Caltrans Inspector number B227 stating 15% MT OK)

Segment Assembly

ABF issued "Inspection Notification Sheet" number 04242010-2 item #2 informing QA that on 4-24-2010 at 22:30 hours ABF Inspectors will be performing ultrasonic (UT) inspections of repaired hold back weld SEG035*-047 which joins the deck plate and edge plate on the crossbeam side of OBG segment 7BW. This weld is located at the Trial Assembly area. This QA Inspector performed ultrasonic inspections of the two weld repair locations as listed on the UT report data sheets for detection of longitudinal and planar transverse indications utilizing scanning patterns A, B, C and D (AWS D1.5 Fig 6.7) and items observed appear to comply with project specifications.

Note: These inspections are being documented and tracked on "Verification Witness Request" documents and no TL-6027 UT report was issued for these inspections.

ABF issued "Inspection Notification Sheet" number 04242010-4 item #3 informing QA that on that on 4-24-2010 at 19:30 hours ABF Inspectors will be performing ultrasonic (UT) inspections of repaired weld CA048-004 which joins the deck plate and edge plate on the bikepath side of OBG segment 8AE. This weld is located at the Trial Assembly area. This QA Inspector observed ABF/Sense UT Inspectors appear to have marked that this weld has unacceptable ultrasonic indications at locations Y=12995, 12920, 12965, 13005 and 13010 (mm) and the other weld repair areas are acceptable. This QA Inspector performed ultrasonic inspections of the six weld repair locations as listed on the UT report data sheets for detection of longitudinal and planar transverse indications utilizing scanning patterns A, B, C and D (AWS D1.5 Fig 6.7) and observed the following "Y" locations appear to have unacceptable transverse ultrasonic indications which were not identified by ABF ultrasonic Inspectors: Y=3180, 5740 and 12790. Note: These inspections are being documented and tracked on "Verification Witness Request" documents and no TL-6027 UT report was issued for these inspections.

ABF issued "Inspection Notification Sheet" number 04242010-4 item #1 informing QA that on 4-24-2010 at 22:00 hours ABF Inspectors will be performing ultrasonic (UT) inspections of repaired weld CA032-002, 006 which joins the deck plate and edge plate on the crossbeam side of OBG segment 7AW. This weld is located at the Trial Assembly area. This QA Inspector performed ultrasonic inspections of the two weld repair locations as listed on the UT report data sheets for detection of longitudinal and planar transverse indications utilizing scanning patterns A, B, C and D (AWS D1.5 Fig 6.7) and items observed appear to comply with project specifications. Note: These inspections are being documented and tracked on "Verification Witness Request" documents and no TL-6027 UT report was issued for these inspections.

Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

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Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
